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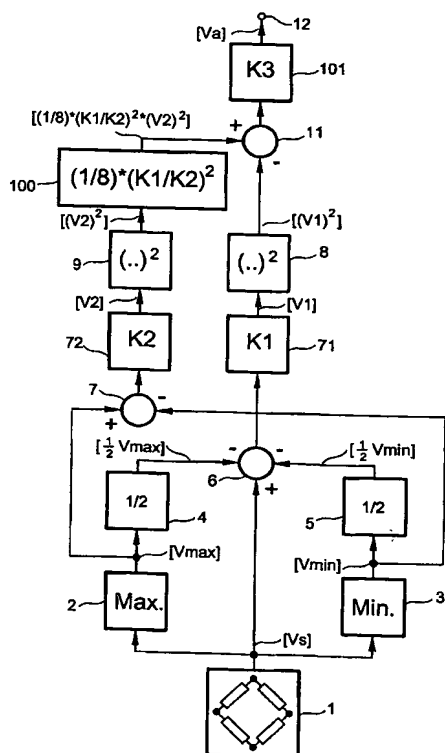
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- (71) Applicant (for DE only): **PHILIPS INTELLECTUAL PROPERTY & STANDARDS GMBH [DE/DE]**; Stein-
damm 94, 20099 Hamburg (DE).
- (71) Applicant (for all designated States except DE, US):
KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven
(NL).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **BUCHHOLD, Rein-
hard [DE/DE]**; c/o Philips Intellectual Property & Stan-
dards GmbH, Weisshausstr. 2, 52066 Aachen (DE).
- (74) Agent: **VOLMER, Georg**; Philips Intellectual Property &
Standards GmbH, Weisshausstr. 2, 52066 Aachen (DE).
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(54) Title: **CIRCUIT ARRANGEMENT METHOD FOR OBTAINING AN OUTPUT SIGNAL, AND ROTATIONAL SPEED MEASUREMENT DEVICE COMPRISING SUCH A CIRCUIT ARRANGEMENT**



(57) Abstract: A circuit arrangement for obtaining an output signal (V_a) from a signal (V_s) containing at least one alternating component comprises a signal source (1) that supplies this signal (V_s), a first peak value detection device (2) for determining a maximum value (V_{max}) of the signal (V_s), a second peak value detection device (3) for determining a minimum value (V_{min}) of the signal (V_s), a first signal linking device (4, 5, 6, 71) for obtaining a first resulting signal (V_1) by additive linking of the signal (V_s), the maximum value (V_{max}) and the minimum value (V_{min}) in accordance with the rule: $V_1 = K_1 * \{V_s - (V_{max} + V_{min})/2\}$, in which K_1 is a freely selectable first constant factor, a second signal linking device (7, 72) for obtaining a second resulting signal (V_2) by additive linking of the maximum value (V_{max}) and a minimum value (V_{min}) in accordance with the rule: $V_2 = (V_{max} - V_{min}) * K_2$, in which K_2 is a freely selectable second factor, a first squaring device (8) for squaring the first resulting signal (V_1), a second squaring device (9) for squaring the second resulting signal (V_2) and a third signal linking device (100, 11, 101) for obtaining the output signal (V_a) by additive linking of the squared first resulting signal ($(V_1)^2$) and the squared second resulting signal ($(V_2)^2$) in accordance with the rule: $V_a = K_3 * \{(1/8) * (K_1/K_2)^2 * (V_2)^2 - (V_1)^2\}$, in which K_3 is a freely selectable third constant factor. By means of the invention, which furthermore includes a rotational speed measurement device comprising such a circuit arrangement and also a method of obtaining an output signal, an unchanged or increased resolution of the output signal can be achieved from the signal containing an alternating component having a restricted resolution.



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